



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/805.682 03/13/01 LABARGE

W DP-302561/DE

EXAMINER

IM22/1010

VINCENT A. CICHOSZ  
DELPHI TECHNOLOGIES, INC.  
LEGAL STAFF, MAIL CODE: 480-414-420  
P.O. BOX 5052  
TROY MI 48007-5052

JOHNSON, E

ART UNIT

PAPER NUMBER

1754

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|                              |                               |                                |  |
|------------------------------|-------------------------------|--------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/805,682 | Applicant(s)<br>LABARGE ET AL. |  |
|                              | Examiner<br>Edward M. Johnson | Art Unit<br>1754               |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1754

**DETAILED ACTION**

***Information Disclosure Statement***

1. The information disclosure statement filed 6/15/01 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The Japanese Patent document no. JP4367707 and dated 11/25/1992, was not found in the file and has been canceled from the Form 1449. The other references were considered as indicated on the form.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mabilon et al. 5,051,392.

Regarding claim 1, Mabilon '392 discloses a catalyst for nitrogen oxides (see column 1, lines 18-20) comprising a porous layer containing calcium and neodymium (see abstract).

Art Unit: 1754

Regarding claims 2-3, Mabilon '392 discloses about 0.1 to about 35% calcium and neodymium (see abstract).

Regarding claims 5-6, Mabilon '392 discloses calcium (see abstract).

Regarding claims 7-8, Mabilon '392 discloses neodymium (see abstract).

Regarding claims 9-12, Mabilon '392 discloses 0-35% zirconium (see column 2, lines 32-37).

Regarding claims 13-14, Mabilon '392 discloses mixing ammonia with alumina (see column 5, lines 64-68 and Example 16).

Regarding claim 16, Mabilon '392 discloses a catalyst for nitrogen oxides (see column 1, lines 18-20) comprising a porous layer containing mixtures of calcium and neodymium (see abstract), zeolite (see column 3, line 54), 0-35% zirconium (see column 2, lines 32-37), and ceramic (see column 3, line 26).

Regarding claims 17-18, Mabilon '392 discloses a catalyst for nitrogen oxides (see column 1, lines 18-20) comprising a porous layer containing mixtures of 0-35% calcium and neodymium (see abstract), zeolite (see column 3, line 54), 0-35% zirconium (see column 2, lines 32-37), and ceramic (see column 3, line 26). All the claimed ranges of components include zero except the alkaline earth oxide, which is an approximation.

Art Unit: 1754

4. Claims 1-4 and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Campbell 4,988,660.

Regarding claim 1, Campbell '660 discloses catalysts comprising neodymium (see column 3, line 45) and calcium (see column 7 lines 52-60).

Regarding claims 16 and 20, Campbell '660 discloses up to about 60% calcium oxide (see column 7, lines 52-60), neodymium (see column 3, line 45), zirconia (see column 7, lines 66-67), and alumina (see column 8, lines 14-18).

Regarding claims 2-4 and 17-19 Campbell '660 discloses up to about 60% calcium oxide (see column 7, lines 52-60), neodymium (see column 3, line 45), zirconia (see column 7, lines 66-67), and alumina (see column 8, lines 14-18). All the claimed ranges of components include zero except the alkaline earth oxide, which is an approximation.

5. Claims 1, 13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornelison et al. 5,319,929.

Regarding claim 1, Cornelison '929 discloses a catalytic converter comprising neodymium and calcium (see column 10, lines 24 and 30).

Regarding claims 13 and 15, Cornelison '929 discloses 5% aluminum and oxygen (see column 10, lines 21 and 27).

#### **Conclusion**

Art Unit: 1754

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakatsuji et al. 5,380,692 discloses NOx reduction catalyst comprising Ca, Nd, and Zr (see abstract); Nakatsuji et al. 5,733,837 discloses NOx catalyst comprising elements of Groups I-VIII and cerium oxide supported on a carrier (see abstract); and Young 3,644,200 discloses ammoniated zeolite catalyst comprising aluminosilicate zeolites.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 703-305-0216. The examiner can normally be reached on M-F 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

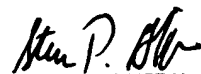
Application/Control Number: 09/805,682

Page 6

Art Unit: 1754

EMJ

October 5, 2001



STEVEN P. GRIFFIN

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700